BRITISH JOURNAL

OF

HAEMATOLOGY

EDITOR

M. WORWOOD

ASSOCIATE EDITORS

J. M. Chessells, M. Contreras, C. G. Geary, D. C. Linch

C. A. Ludlam, S. J. Machin, A. C. Newland, I. R. Peake, W. G. Wood

ANNOTATIONS EDITOR

L. Luzzatto

EDITORIAL BOARD

Allan Jacobs *Chairman*

A. J. Barrett, A. L. Bloom, D. Catovsky, J. C. Cawley, I. Chanarin

J. M. Goldman, E. C. Gordon-Smith, A. V. Hoffbrand, E. R. Huehns

M. Pippard, H. van der Berghe, J. A. Whittaker

A. J. Bellingham *representing the British Society for Haematology*

Volume 68

Pages 1–514

BLACKWELL SCIENTIFIC PUBLICATIONS

OXFORD LONDON EDINBURGH BOSTON PALO ALTO MELBOURNE

1988

PUBLISHED BY BLACKWELL SCIENTIFIC PUBLICATION LTD, OSNEY MEAD, OXFORD

© 1988 Blackwell Scientific Publications. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by Blackwell Scientific Publications for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of $03.00 per copy is paid directly to CCC, 27 Congress Street, Salem, MA 01970, U.S.A. Special requests should be addressed to the Editor. 0007-1048/88 $03.00.

Printed in Great Britain at the Alden Press, Oxford

BRITISH JOURNAL OF HAEMATOLOGY

Vol. 68 No. 1 January 1988

ANNOTATION. GIAN FRANCO GAETANI and ANNA MARIA FERRARIS. Recent developments on Mediterranean G6PD 1

PETER G. J. NIKKELS, JOHANNES P. DE JONG and ROB E. PLOEMACHER. Effects of cis-diamminedichloroplatinum (II) upon haemopoietic progenitors and the haemopoietic microenvironment in mice 3

MENNO A. DE RIE, DIEDERIK J. M. VAN HEEMSTRA, PETER C. HUIJGENS, WIM P. ZEIJLEMAKER, THEO A. OUT, CORNELIS J. M. MELIEF and ALBERT E. G. KR. VON DEM BORNE. Production of mouse monoclonal antibodies for the analysis of idiotypes in serum of patients with chronic lymphatic leukaemia 11

A. WORSLEY, D. G. OSCIER, J. STEVENS, S. DARLOW, ANN FIGES, G. J. MUFTI and T. J. HAMBLIN. Prognostic features of chronic myelomonocytic leukaemia: a modified Bournemouth score gives the best prediction of survival 17

G. HEIL, A. GANSER, A. RAGHAVACHAR, E. KURRLE, W. HEIT, D. HOELZER and H. HEIMPEL. Induction of myeloperoxidase in five cases of acute unclassified leukaemia 23

FRANCO DALLEGRI, ALBERTO BALLESTRERO, GUIDO FRUMENTO, RICCARDO GORETTI and FRANCO PATRONE. Monocyte-derived macrophages as helper cells in monocyte-mediated cytolysis 33

R. GOLDSCHMEDING, F. C. BREEDVELD, C. P. ENGELFRIET and A. E. G. KR. VON DEM BORNE. Lack of evidence for the presence of neutrophil autoantibodies in the serum of patients with Felty's syndrome 37

A. SALAMA, K. T. PREISSNER, B. GÖTTSCHE, G. MÜLLER-BERGHAUS and C. MUELLER-ECKHARDT. Complement inhibitor S protein is associated with membranes of red blood cells from patients with paroxysmal nocturnal haemoglobinuria 41

MANSOOR SALEH, WAYNES COURT, WILLIAM HUSTER, DENISE SHAW and ALBERT LOBUGLIO. Effect of commercial immunoglobulin G preparation on human monocyte Fc-receptor dependent binding of antibody coated platelets 47

BRUCE LAGES and HARVEY J. WEISS. Heterogeneous defects of platelet secretion and responses to weak agonists in patients with bleeding disorders 53

H. COHEN, S. D. SCOTT, I. J. MACKIE, M. SHEARER, R. BAX, S. J. KARRAN and S. J. MACHIN. The development of hypoprothrombinaemia following antibiotic therapy in malnourished patients with low serum vitamin K_1 levels 63

L. I. THORSEN, G. GAUDERNACK, N. HACK, J. M. WILKINSON, F. BROSSTAD, N. O. SOLUM and N. CRAWFORD. Characterization of a monoclonal antibody ITI-Pl 1 directed against human platelet membrane glycoprotein IIb using extracts of whole platelets and platelet surface and intracellular membranes 67

BRIAN SAVAGE, STEPHEN R. HANSON and LAURENCE A. HARKER. Selective decrease in platelet dense granule adenine nucleotides during recovery from acute experimental thrombocytopenia and ensuing thrombocytosis in baboons 75

P. J. GAFFNEY, L. J. CREIGHTON, M. J. PERRY, M. CALLUS, R. THORPE and M. SPITZ. Monoclonal antibodies to crosslinked fibrin degradation products (XL-FDP). I. Characterization and preliminary evaluation in plasma 83

P. J. GAFFNEY, L. J. CREIGHTON, M. CALLUS and R. THORPE. Monoclonal antibodies to crosslinked fibrin degradation products (XL-FDP). II. Evaluation in a variety of clinical conditions 91

MICHAEL C. BERNDT, ARNOLD KABRAL, PHILLIP GRIMSLEY, NEVILLE WATSON, THOMAS I. ROBERTSON and KENNETH F. BRADSTOCK. An acquired Bernard-Soulier-like platelet defect associated with juvenile myelodysplastic syndrome 97

KENICHI FURIHATA, JAY HUNTER, RICHARD H. ASTER, GALE R. KOEWING, N. RAPHAEL SHULMAN and THOMAS J. KUNICKI. Human anti-Pl^{E1} antibody recognizes epitopes associated with the alpha subunit of platelet glycoprotein Ib 103

JORMA J. OHISALO, JUHA VIITALA, RIITTA LINTULA and TAPANI RUUTU. A new congenital dyserythropoietic anaemia 111

YOSHIFUMI KAWANO, CATHERINE NISSEN, ALOIS GRATWOHL and BRUNO SPECK. Immunostimulatory effects of different antilymphocyte globulin preparations: a possible clue to their clinical effect 115

A. HUISMAN, J. G. AARNOUDSE, M. KRANS, H. J. HUISJES, V. FIDLER and W. G. ZIJLSTRA. Red cell aggregation during normal pregnancy 121

SIMEON POLLACK and VERA SCHNELLE. Inability to detect transferrin receptors on *P. falciparum* parasitized red cells 125

C. M. REDMAN, W. L. MARSH, A. SCARBOROUGH, C. L. JOHNSON, B. I. RABIN and M. OVERBEEKE. Biochemical studies on McLeod phenotype red cells and isolation of Kx antigen 131

CASE REPORTS

C. Selleri, L. Catalano, F. Alfinito, G. De Rosa, S. Vaglio and B. Rotoli. Cyclosporin A in adult-onset cyclic neutropenia 137

Petr Lemež. A case of acute promyelocytic leukaemia with 'faggot cells' exhibiting strong alpha-naphthylbutyrate esterase activity 138

A. Tichelli, A. Gratwohl, A. Wuersch, C. Nissen and B. Speck. Antilymphocyte globulin for myelodysplastic syndrome? 139

G. Rossi, R. Gorla, G. P. Cadeo, R. Stellini and G. Marinone. Acute lymphoblastic leukaemia of B cell origin in an anti-HIV positive intravenous drug abuser 140

CORRESPONDENCE

V. Brito-Babapulle, P. Daly and D. Catovsky. Possible association of disseminated intravascular coagulation (DIC) with the chromosomal region 17q12–21 and the gene for glycoprotein IIb–IIIa complex 142

P. A. McKinney, R. A. Cartwright and B. Pearlman. Hairy cell leukaemia and occupational exposures 142

P. J. M. Philip, I. Sudaka, N. Gratecos, J. Bayle and N. Ayraud. T prolymphocytoid leukaemic transformation of a T chronic lymphoid leukaemia characterized by surface markers as helper T cells for B cell immunoglobulin synthesis 143

J. T. Beranek. Possible and up to now not exploited treatment in myelofibrosis 144

Book Reviews; Books Received; Announcements 145

Vol. 68 No. 2 February 1988

ANNOTATION. M. Y. Gordon. Adhesive properties of haemopoietic stem cells 149

Z. Pojda, T. M. Dexter and B. I. Lord. Production of a multipotential cell (CFU-S) proliferation inhibitor by various populations of mouse and human macrophages 153

Paul Baines, Gillian S. Masters, Christopher Lush and Allan Jacobs. Enrichment of haemopoietic progenitor cells from the marrow of patients with myelodysplasia 159

Bertil E. Glader and Karen Backer. Elevated red cell adenosine deaminase activity: a marker of disordered erythropoiesis in Diamond-Blackfan anaemia and other haematologic diseases 165

Kazunari Yamaguchi, Tetsuyuki Kiyokawa, Kiyonobu Nakada, Lee Song Yul, Norio Asou, Toshinori Ishii, Isao Sanada, Motoharu Seiki, Mitsuaki Yoshida, Estela Matutes, Daniel Catovsky and Kiyoshi Takatsuki. Polyclonal integration of HTLV-I proviral DNA in lymphocytes from HTLV-I seropositive individuals: an intermediate state between the healthy carrier state and smouldering ATL 169

U. Schmidt, M.-L. Mlynek and L.-D. Leder. Electron-microscopic characterization of mixed granulated (hybridoid) leucocytes of chronic myeloid leukaemia 175

Junko Suda, Mitsuoki Eguchi, Takebumi Ozawa, Toshiharu Furukawa, Yasuhide Hayashi, Seiji Kojima, Hiroo Maeda, Kenji Tadokoro, Yuko Sato, Yasusada Miura, Akira Ohara and Toshio Suda. Platelet peroxidase-positive blast cells in transient myeloproliferative disorder with Down's syndrome 181

Jorge J. Yunis, Michael Lobell, Mark A. Arnesen, Martin M. Oken, Mary G. Mayer, Robert E. Rydell and Richard D. Brunning. Refined chromosome study helps define prognostic subgroups in most patients with primary myelodysplastic syndrome and acute myelogenous leukaemia 189

Gao Ling Min, Jill Hibbin, Christopher Arthur, Jane Apperley, Alec Jeffreys and John Goldman. Use of minisatellite DNA probes for recognition and characterization of relapse after allogeneic bone marrow transplantation 195

Brian G. M. Durie and William S. Dalton. Reversal of drug-resistance in multiple myeloma with verapamil 203

Jean-François Rossi, Bernard Klein, Therese Commes, Michel Jourdan and Charles Janbon. Interleukin 2 production in bone marrow of normal individuals and patients associated with B-cell chronic lymphocytic leukaemia 207

Riccardo Manconi, Alessandro Poletti, Rachele Volpe, Sandro Sulfaro and Antonino Carbone. Dendritic reticulum cell pattern as a microenvironmental indicator for a distinct origin of lymphoma of follicular mantle cells 213

E. Conde, A. Iriondo, C. Rayon, C. Richard, E. Fanjul, J. Garijo, V. Hermosa, A. Coma, C. Bello, D. Carrera, J. Baro and A. Zubizarreta. Allogeneic bone marrow transplantation versus intensification chemotherapy for acute myelogenous leukaemia in first remission: a prospective controlled trial 219

J. Goudemand, B. Samor, C. Caron, B. Jude, D. Gosset and C. Mazurier. Acquired type II von Willebrand's disease: demonstration of a complexed inhibitor of the von Willebrand factor–platelet interaction and response to treatment 227

Sharron L. Pfueller and Rosemary David. Platelet-associated immunoglobulins G, A and M are secreted during platelet activation: normal levels but defective secretion in grey platelet syndrome 235

F. Bernardi, S. Guerra, P. Patracchini, S. Volinia, D. Buzzoni, G. Ballerini, A. Casonato and G. Marchetti. Von Willebrand disease investigated by two novel RFLPs 243

Y. J. Fei, S. Fujita and T. H. J. Huisman. Two different theta (θ) globin gene deletions observed among black newborn babies 249

P. Joshi and C. M. Gupta. Abnormal membrane phospholipid organization in *Plasmodium falciparum*-infected human erythrocytes 255
CASE REPORT
P. Sonneveld, A. Hagemeijer and J. Abels. Acute lymphoblastic leukaemia occurring 6 years after treatment of Hodgkin's disease 261
CORRESPONDENCE
Shinya Fujii. The role of glutathione peroxidase in the anti-oxidant system of erythrocytes 263
H. C. Drysdale and D. R. Higgs. α-Thalassaemia in an Asian Indian 264
D. G. Oscier and J. C. Stevenson. Ectopic production of calcitonin and hypocalcaemia in acute leukaemia 265
E. Putintseva and Y. García-Triana. Thrombopoietic inhibitory activity in serum of patients with refractory anaemia 265
Masaki Yasukawa, Kikue Iwamasa, Akira Inatsuki, Tomonori Tamai, Shigeru Fujita and Yuzuru Kobayashi. Rearrangement of the *bcr* gene in chronic myelogenous leukaemia with T lymphoblastic and megakaryoblastic mixed crisis 266
R. Cattaneo, G. Rossi, G. Carella, R. Gorla, M. Bettinzioli and R. Stellini. HLA antigens and thrombocytopenia in HIV seropositive subjects 268
Liliane Intrator, Eric Oksenhendler, Lionel Desforges and Philippe Bierling. Anticardiolipin antibodies in HIV infected patients with or without immune thrombocytopenic purpura 269
William Brien, Martin Inwood and Greg Denome. Antiphospholipid antibodies in haemophiliacs 270
Rosa T. Canoso, Leonard I. Zon and Jerome E. Groopman. Anticardiolipin antibodies associated with HTLV-III infection 270
Book Reviews; Announcement 272

Vol. 68 No. 3 March 1988

D. M. Harvey, K. J. Sheppard, A. G. Morgan and J. Fletcher. Neutrophil function in patients on continuous ambulatory peritoneal dialysis 273
R. Dadmarz and J. C. Cawley. Heterogeneity of CLL: high CD23 antigen and αIFN receptor expression are features of favourable disease and of cell activation 279
C. F. Hoyle, D. M. Swirsky, L. Freedman and F. G. J. Hayhoe. Beneficial effect of heparin in the management of patients with APL 283
Donald E. Macfarlane, David Gailani and Kenneth Vann. A phorbol ester tolerant (PET) variant of HL-60 promyelocytes 291
J. Beard and G. F. Savidge. High-dose intravenous immunoglobulin and splenectomy for the treatment of HIV-related immune thrombocytopenia in patients with severe haemophilia 303
O. Nordfang, M. Ezban, P. Nilsson and J. B. Knudsen. Radioimmunoassay for quantitative measurement of factor VIII-heavy chain 307
Satoko Nakamura, Atsushi Kato, Yoichi Sakata and Nobuo Aoki. Bleeding tendency caused by IgG inhibitor to factor XIII, treated successfully by cyclophosphamide 313
A. M. H. P. van den Besselaar, J. Hermans, H. Beeser and E. A. Loeliger. Long-term stability of international reference preparations for thromboplastins 321
S. Gandrille, P. Priollet, L. Capron, M. Roncato, J. N. Fiessinger and M. Aiach. Association of inherited dysfibrinogenaemia and protein C deficiency in two unrelated families 329
A. Borowska, D. Lauri, A. Maggi, E. Dejana, G. de Gaetano, M. B. Donati and J. Pangrazzi. Impairment of primary haemostasis by low molecular weight heparins in rats 339
K. McGrath, M. Wolf, J. Bishop, M. Veale, H. Ayberk, J. Szer, I. Cooper and M. Whiteside. Transient platelet and HLA antibody formation in multitransfused patients with malignancy 345
D. G. Efremov, G. D. Efremov, N. Zisovski, N. Stojanovski, F. Kutlar, J. C. Diaz-Chico, A. Kutlar, K. G. Yang, T. A. Stoming and T. H. J. Huisman. Variation in clinical severity among patients with Hb Lepore-Boston-β-thalassaemia is related to the type of β-thalassaemia 351
R. Sheffer, G. Cividalli, Y. Zaharan, H. Tamari and E. Okon. Disturbed patterns of globin chain synthesis in childhood monosomy 7 myeloproliferative syndrome 357
H. A. A. Brouwers, M. A. M. Overbeeke, E. Huiskes, M. J. E. Bos, W. H. Ouwehand and C. P. Engelfriet. Complement is not activated in ABO-haemolytic disease of the newborn 363
Laura Dezza, Mario Cazzola, Gaetano Bergamaschi, Carmelo Carlo Stella, Paolo Pedrazzoli and Helios R. Recalde. Effects of recombinant human H-subunit and L-subunit ferritins on *in vitro* growth of human granulocyte–monocyte progenitors 367
K. B. Raja, R. J. Simpson, M. J. Pippard and T. J. Peters. *In vivo* studies on the relationship between intestinal iron (Fe^{3+}) absorption, hypoxia and erythropoiesis in the mouse 373
Gaetano Bergamaschi, Mario Cazzola, Laura Dezza, Eufemia Savino, Luigi Consonni and Douglas Lappi. Killing of K562 cells with conjugates between human transferrin and a ribosome-inactivating protein (SO-6) 379
I. M. Hoepelman, E. Y. Jaarsma, J. Verhoef and J. J. M. Marx. Polynuclear iron complexes impair the function of polymorphonuclear granulocytes 385
CASE REPORT
R. T. Hughes, D. W. Milligan, G. M. Smith, M. J. Leyland and E. C. Gordon-Smith. A

second bone marrow transplant for acute myeloid leukaemia after transplantation for aplastic anaemia 391
CORRESPONDENCE
ANNE B. MASON, STEPHEN A. BROWN, ROBERT C. PENHALLOW, VLADIMIR VIKLICKY, ANTONIN HRADILEK and JAN NEUWIRT. Monoclonal antibodies to human transferrins 392
C. HOYLE and F. G. J. HAYHOE. Abnormal megakaryopoiesis in acute leukaemia 393

Vol. 68 No. 4 April 1988

C. D. L. REID, J. FIDLER and A. KIRK. Endogenous erythroid clones (EEC) in polycythaemia and their relationship to diagnosis and the response to treatment 395
P. BIANCO, M. COSTANTINI, L. C. DEARDEN and E. BONUCCI. Alkaline phosphatase positive precursors of adipocytes in the human bone marrow 401
DANIELA ZAULI, M. GOBBI, CRISTINA CRESPI, P. L. TAZZARI, F. MISEROCCHI and ANGELA TASSINARI. Cytoskeleton organization of normal and neoplastic lymphocytes and lymphoid cell lines of T and B origin 415
F. BRITO-BABAPULLE, D. CATOVSKY and D. A. G. GALTON. Myelodysplastic relapse of *de novo* acute myeloid leukaemia with trilineage myelodysplasia: a previously unrecognized correlation 411
C. R. J. SINGER, D. C. LINCH, S. G. BOWN, E. R. HUEHNS and A. H. GOLDSTONE. Differential phthalocyanine photosensitization of acute myeloblastic leukaemia progenitor cells: a potential purging technique for autologous bone marrow transplantation 417
J. J. MICHIELS, H. J. ADRIAANSEN, A. HAGEMEIJER, H. HOOIJKAAS, J. J. M. VAN DONGEN and J. ABELS. TdT positive B-cell acute lymphoblastic leukaemia (B-ALL) without Burkitt characteristics 423
P. M. MANNUCCI, A. R. ZANETTI, M. COLOMBO, AND THE STUDY GROUP OF THE FONDAZIONE DELL'EMOFILIA. Prospective study of hepatitis after factor VIII concentrate exposed to hot vapour 427
S. HOLME, A. HEATON, A. KUNCHUBA and P. HARTMAN. Increased levels of platelet associated IgG in patients with thrombocytopenia are not confined to any particular size class of platelets 431
JOHAN MALM, MARTIN LAURELL and BJÖRN DAHLBÄCK. Changes in the plasma levels of vitamin K-dependent proteins C and S and of C4b-binding protein during pregnancy and oral contraception 437
JOHAN MALM, ROLF BENNHAGEN, LARS HOLMBERG and BJÖRN DAHLBÄCK. Plasma concentrations of C4b-binding protein and vitamin K-dependent protein S in term and preterm infants: low levels of protein S–C4b-binding protein complexes 445
KAREN HELENE ÖRSTAVIK and CONNIE H. MILLER. IgG subclass identification of inhibitors to factor IX in haemophilia B patients 451
JOHN G. GILMAN, MARY E. JOHNSON and NOBORU MISHIMA. Four base-pair DNA deletion in human $^{A}\gamma$ globin-gene promoter associated with low $^{A}\gamma$ expression in adults 455
A. R. BIRD, P. KENT, P. P. MOORES and T. ELLIOTT. Haemoglobin M-Hyde Park associated with polyagglutinable red blood cells in a South African family 459
T. J. GREENWALT and U. J. DUMASWALA. Effect of red cell age on vesiculation *in vitro* 465
KRISTINE DONEY, RAINER STORB, C. DEAN BUCKNER and E. DONNALL THOMAS. Treatment of gold-induced aplastic anaemia with immunosuppressive therapy 469
SHUICHI TANIGUCHI, TSUNEFUMI SHIBUYA, EIJI MORIOKA, TAKASHI OKAMURA, SEIICHI OKAMURA, SHOICHI INABA and YOSHIYUKI NIHO. Demonstration of three distinct immunological disorders of erythropoiesis in a patient with pure red cell aplasia and autoimmune haemolytic anaemia associated with thymoma 473
A. SALAMA, H. NORTHOFF, H. BURKHARDT and C. MUELLER-ECKHARDT. Carbimazole-induced haemolytic anaemia: role of drug–red blood cell complexes for immunization 479
A. EGYED. Carrier mediated iron transport through erythroid cell membrane 483
MEETING REPORT
SECOND MIC COOPERATIVE STUDY GROUP. Morphologic, immunologic and cytogenetic (MIC) working classification of the acute myeloid leukaemias 487
CORRESPONDENCE
F. LANZA and G. L. CASTOLDI. Basophil count in samples from chronic leukaemia patients analysed by the automated flow cytochemistry technology 495
YOSHIRO NIITSU, YOSHIRO GOTO, NOBUKO ARISATO, KATSUNORI SASAKI and YUTAKA KOHGO. Ferritin-binding proteins in serum 496
GARTH ANDERSON, PAUL D. MINTZ, E. L. BELLHOUSE, MARY J. INSKIP, J. G. DAVIS and C. C. ENTWISTLE. Pre-transfusion non-invasive quality assessment of stored platelet concentrates 497
HELEN DODSWORTH and EDITH WIENER. Non-immune nature of anaemia in HIV infection 498
Book Reviews 500
Announcements 503
Abstracts of papers presented at a one-day scientific meeting of the British Society for Haematology, London, 8 January 1988 505
Author and Subject Indexes to Volume 68 511